17%). Considering the disease treatment distribution, 857 patients were treated for rheumatoid arthritis (28,55%), 811 for psoriatic arthritis (27,02%), 421 for psoriasis (14,02%) and remaining patients for other diseases (i.e. ankylosing spondylitis, ulcerative colitis) . 86 patients (25.8%) switch biologic therapy within the first 120 days, 97 patients (29.22%) between 120 and 210 days, 82 patients (24.70%) between 210 and 300 days, 67 patients (20, 18%) between 300 and 365 days. **CONCLUSIONS:** The present study is able to provide a map of the current strategy of treatment with biologics in the region Lazio considering medical conditions and prescribed treatments.

PHP55

CAPTURING ACCURATE CONCOMITTANT MEDICATIONS INFORMATION IN GLOBAL TRIALS

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OBJECTIVES: To understand the full impact of a novel treatment, particularly in more subjective symptoms such as pain, capturing information on any additional medication a patient may have taken alongside the study drug is vital. Two major challenges to the accurate recording of this data in global clinical trials have been 1) producing "localisations" of concomitant medications that are applicable and comparable in all countries involved in the study; and 2) moving away from a reliance on retrospective, site-based capture from patients. The aim of this study was to develop and document an easy to use electronic diary solution combined with an appropriately localised medication list. **METHODS:** An electronic medication diary which allowed for the recording of medication name, route of administration and dosage was developed for a handheld platform, with iterative testing and refinement in users. The solution included a pre-populated, tailored list of the patient's most common drugs (n = 38), which could be localised on a country-by-country basis (n = 21) following a process for ensuring the appropriateness of the drug name in the local market. **RESULTS:** The iterative approach to design and development ensured the development of an electronic solution which was user-friendly and intuitive. Over 3 rounds of testing a number of updates were made based on feedback from user relating to the flow of the diary and the training module. Best practice for developing appropriate localised list of concomitant medication involved asking two local experts for feedback using in-country medical databases. **CONCLUSIONS:** Accurate tracking of concomitant medication usage is an important aspect of assessing the effectiveness of a new treatment. A user-focused electronic diary solution overcomes the limitations of traditional, retrospective approaches to capturing this information. Localisation of the concomitant drug list ensures accurate and comparable data captured across all studies in a trial.

PHP56

PREVALENCE AND PERCEPTION OF USE OF NON-PRESCRIPTION MEDICINES AMONG MEDICAL STUDENT IN QUETTA, PAKISTAN

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OBJECTIVES: This study aimed to evaluate the Prevalence and Perception Use of Non-Prescription medicines (NPM) among medical undergraduate students (i.e. from pharmacy, MBBS and nursing students) in Quetta, Pakistan. **METHODS:** A cross-sectional study was conducted by using self-administered questionnaire, which consists of 15 questions. Medical students i.e. pharmacy, MBBS and nursing students were included in the study from different institutes providing the medical education. he descriptive statistics (frequencies and percentage) was used to present the data . All analyses were performed using SPSS 20.0. **RESULTS:** A total of 300 questionnaires were distributed and 260 were returned (Response rate of 86.7%). Among 260 respondents females were 164 (63.1%). Majority of participants 246 (94.6%) knew about Non-Prescription medicines (NPM), 240 (92.3%) were used NPM drugs and 228 (87.7%) purchases NPM easily form the pharmacies. one hundred and forty (53.8%) respondents know about contraindication of NPM drugs while 205 (78.8%) recommended the use of NPM to friend and relatives. The major use of NPM is to relief ache, pain and other condition such as cough, cold, fever, diarrhea, dysmenorrhea constipation, vomiting and flu etc. **CONCLUSIONS:** This study showed that majority of the Medical students were aware of different non-prescription medicines and their use and high prevalence is present among medical student to use these NPM for minor illness.

PHP57

DRUG UTILIZATION STUDY ON INDIAN ELDERLY AMBULATORY PATIENTS USING WHO PRESCRIBING INDICATORS

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OBJECTIVES: Studies on the characterization of prescription among Indian elderly are limited in literature. This study, therefore, aimed to evaluate the prescription pattern specifically among Indian elderly patients using WHO prescribing indicators. **METHODS:** Prescriptions of 4005 outpatients, age 60 yrs or above, were evaluated prospectively using WHO prescribing indicators. **RESULTS:** The average age (±SEM) of patients was 68.28±0.11 yrs. On an average, each patient had 2.01±0.01 diagnoses & was prescribed 6.45±0.04 drugs. The most common disorder was 'Diseases of circulatory system". The patients were prescribed an average of 6.45±0.04 medications. Over half of the patients (57.9%) received more than five medications concurrently. The percentage of drugs prescribed by generic name was only 0.8%. Antibiotic usage was 13% while 7.3% of patients were prescribed injections. The percentage of drugs prescribed from National List of Essential Medicines 2003 was 66% of the drugs prescribed. **CONCLUSIONS:** The minimal prescription of antimicrobials and injections coupled with higher prescriptions from essential drug list is a very positive reflection of good prescribing among elderly outpatients. Studies on the characterization of prescription among Indian elderly are limited in literature. This study, therefore, aimed to evaluate the prescription pattern specifically among Indian elderly patients using WHO prescribing indicators.

PHP58

DYNAMICS OF PUBLIC OUTPATIENT DRUG EXPENDITURES IN AUSTRIA, 2005-2015

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OBJECTIVES: The aim of this study is to determine the main causes of the dynamics of outpatient drug expenditures in Austria on an aggregate view (ATC level 1) over the last 10 years and to identify the key factors for the current developments at a more detailed, therapeutic level. **METHODS:** The data comprise the filled prescriptions at the expense of all statutory health insurance funds in Austria, covering more than 97% of the national population. Observation period is from 2005 to 2014, with a preview of 2015. Year-on-year changes are calculated at different ATC levels. Costs are in euros excluding VAT. **RESULTS:** Pharmaceutical expenditures increased significantly from 2005 until 2008, while from 2009 to 2013 there were only moderate increases. In 2014, expenditures started to rise considerably again, the ATC groups J (antiinfectives), L (antineoplastics and immunomodulators), and B (blood and blood forming organs) practically being the sole causes. One steady development over the last 10 years is the constant cost increase in the group L. Group N (nervous system) was the second cost driver until 2011, but faded afterwards. Beginning with 2012, group B is one of the major cost drivers. There are recently no significant cost declines through losses of exclusivity, except for the year 2013. Looking more into detail, one can observe that the current rise is strongly dominated by the new hepatitis c drugs (part of group J), followed by direct oral anticoagulants (DOACs, part of group B). **CONCLUSIONS:** The new hepatitis c drugs are the main cause for the current increases in public outpatient pharmaceutical expenditures in Austria. As there are no remarkable compensating savings via generic entries, the cost rise poses a severe challenge for the public health insurance system, especially amid continuing weak economic growth and therefore stressed health budgets.

PHP59

ASSESSMENT OF WHO/INRUD CORE DRUG USE INDICATORS IN TWO TERTIARY CARE HOSPITALS OF BAHAWALPUR, PUNJAB, PAKISTAN

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OBJECTIVES: To assess drug use pattern in outpatient departments (OPDs) of two tertiary care hospitals (Bahawal Victoria Hospital and Civil Hospital) of Bahawalpur, Pakistan. **METHODS:** This was a descriptive, non-experimental and cross-sectional study. For the prescribing indicators, 2,400 prescriptions (10 OPDs per hospital, 120 prescriptions per OPD) were systematically sampled out of the total 1,560, 000 prescriptions written during April 2014 to March 2015. A total of 600 randomly selected patients (300 patients per hospital, 30 per OPD) and all pharmacists available in both hospitals were interviewed to investigate the patient-care and facility-specific indicators. We used published ideal standards for each of the WHO/INRUD indicators. **RESULTS:** Among the prescribing indicators, the average number of drugs per encounter was 2.8 (SD = 1.3) (optimal value = 1.6–1.8), the drugs prescribed by generic name were 56.6% (optimal value = 100%), the encounters with an antibiotic prescribed were 51.5% (optimal value = 20.0–26.8%), the encounters with an injection prescribed were 0.0% (optimal value = 13.4–24.1%) and the drugs prescribed from Essential Drugs List (EDL) were 98.8% (optimal value = 100%). Among the patient-care indicators, the average consultation time was 1.2 minutes (SD = 0.8) (optimal value ≥ 10 minutes), the average dispensing time was 8.7 seconds (SD = 4.9) (optimal value ≥ 90 seconds), the percentage of drugs actually dispensed was 97.3% (optimal value = 100%), the percentage of drugs adequately labeled was 97.3% (optimal value = 100%) and the patients' knowledge of correct dosage was 61.6% (optimal value = 100%). Among the facility-specific indicators, both health care facilities had a copy of EDL and key drugs available in the stock were 72.4% (optimal value = 100%). **CONCLUSIONS:** Irrational use of drugs was observed in both health care facilities. Continuous education of the physicians, increased physician-to-patient and pharmacist-to-patient ratio are some options to promote rational drug use.

PHP60

A CROSS-SECTIONAL ANALYSIS OF RECENTLY PUBLISHED SYSTEMATIC LITERATURE REVIEWS ON PHARMACOLOGICAL INTERVENTIONS IN ONCOLOGY

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OBJECTIVES: Systematic literature reviews (SLRs) play an important role in evidence-based medicine and are increasingly favored over traditional narrative reviews as a method to objectively summarize vast amounts of outcomes data. Our objective was to evaluate a cross-section of published SLRs in oncology and determine the top journals, main purposes, meta-analysis frequency, and sponsorship. **METHODS:** Searches were conducted in Embase and MEDLINE for the year 2014 and further restricted to cancer topics. Case reports, editorials, conference abstracts, and letters were excluded. Abstracts were manually reviewed to identify SLRs, published in journals, and reporting oncology drug therapy. **RESULTS:** A total of 1,510 unique citations were identified; 727 were determined to be SLRs in oncology. 9 SLRs included case reports describing rare cancers or adverse drug reactions. Drug therapy was noted in 391 publications (53.8%); 210 included meta-analysis. Journals publishing the largest number of SLRs were PLoS ONE (n=30), Tumor Biology (n=17), Cancer Treatment Reviews (n=15), World Journal of Gastroenterology (n=10) and Journal of Clinical Oncology (n=9). Impact factors for these journals ranged from 2.369 to 17.879. Most frequent purposes were treatment comparisons (27.9%), efficacy assessments (15.6%),